

species in hand is the only end aimed at, the result may be attained more quickly by singling out some obvious but accidental character on which to base the process of dichotomy. To separate *Cenchrus*, for instance, from all other grasses because of its peculiar fruit may be the easiest way to identify it; but if the beginner as a result loses sight of the fact that *Cenchrus* has its exact place in a regular system of classification, and regards it as a sort of anomaly, then the work of the great post-Linnaean agrostologists has gone for naught, and we are relegated to the unsound and superficial methods of classification that prevailed in the time of the herbalists. It remained for Trinius and his successors to clear up the confused and mistaken ideas that prevailed as to the structure of the grass-flower, and make the *spikelet* the basis of all classification; and on this foundation modern agrostology solidly rests. To undo what has been done and invent a new system of classification founded on some other basis is to attempt a disastrous innovation. It is beside the point to argue that the beginner finds the natural system too difficult. If proper care is taken at first, it is as easy to learn scientific methods as unscientific. Is it more difficult for the student to apprehend the distinction between the two sub-families Panicoideae and Pooideae than it is to be asked to consider the tribe Hordeae as set off from all the rest of the family by the form of its inflorescence? There is a science of classification, just as there is a science of morphology; to ignore it in the one case and insist on it in the other will result in a fatal inconsistency, and in an inability to grasp the true meaning of scientific method.

J. C. NELSON.

PROCEEDINGS OF THE CLUB

APRIL 24, 1918

The meeting was held in the Museum building of the New York Botanical Garden at 3:30 P.M. Vice-president Barnhart presided. There were twenty-one persons present. The minutes of March 27 and April 9 were read and approved.

Mr. C. E. Foote, of Jackson, Mich., was nominated for membership.

The question of holding a meeting of the Club on the last Wednesday in May was discussed and left with Mrs. Britton, Chairman of the Program Committee for settlement.

Upon the motion of Mrs. Britton the Club voted to authorize the Treasurer to purchase with funds from the Underwood Fund a one thousand dollar registered U. S. Bond of the Third Liberty Loan issue.

Mr. C. E. Foote was elected to membership.

The scientific program was then carried out.

Dr. N. L. Britton read a paper on "A Brief Memorial of the late Dr. J. A. Shafer." This paper will be published in the *Journal of the New York Botanical Garden*.

Dr. B. O. Dodge spoke briefly on the subject "Notes on Gymnosporangium." Dr. Dodge spoke of the curious situation existing at the New York Botanical Garden where abundant infections of the apples and hawthorns with *Gymnosporangium macropus* and *G. globosum* were found in 1917, while the alternate telial stages appear not to have been present on the red cedars in the immediate vicinity. On the other hand, *G. nidus-avis* and *G. clavipes* are very commonly present on the red cedars in the grounds while their aecidial stages were not found last year in the same region. The speaker reported on his studies on the origin of the teleutospores in *G. macropus*, *G. globosum*, *G. clavariaeforme* and *G. nidus-avis*. The spores do not arise from the terminal cells of the pseudo-parenchyma as reported by Blackman, Reed and Crabill and others. The terminal cells degenerate and spores are formed from buds growing out of penultimate cells.

The next number of the program "Exhibit of Early Spring Flowers" (Cultivated) was given by Mr. Kenneth Boynton.

Dr. F. J. Seaver exhibited a rare species of Ascomycete, *Haematehia*. This fungus will revive when moistened after being dried, in the same way that members of the Auriculaceae are known to do.

Adjournment followed.

B. O. DODGE,
Secretary

MAY 14, 1918

The meeting was held at the American Museum of Natural History. The meeting was called to order at 8:20 P.M. with Miss Grace Stewart in the chair. There were ten persons present.

The scientific program consisted of a lecture on "A Brief History of the Classification of Flowering Plants" by Dr. A. Gundersen. The lecture was illustrated by lantern slides. An abstract by the lecturer follows.

"Theophrastus in the third century B.C. classified plants as trees, shrubs, half-shrubs and herbs. The sixteenth century herbalists mark the first definite progress. Lobelius separated plants with leaves having parallel veins from those with netted veins. Caesalpini made two main groups, woody plants and herbs, and secondary groups by fruit characters. Ray introduced the terms monocotyledons and dicotyledons as subdivisions of herbs. Tournefort was the first to make a clear exposition of genera.

"Linnaeus adopted a simple artificial system, but said it was only a thread of Ariadne, to help him find his way; the great aim of botany was to discover a natural system. Laurent de Jussieu in 1789 published descriptions of a hundred families; his grouping was improved by De Candolle. The work of Robert Brown and Hofmeister established main groups of the higher plants. After Darwin, the idea that classification should express evolution gradually became dominant. Bentham and Hooker, Eichler, and Engler aided in establishing groups of families, now called orders, hardly yet defined.

"The speaker quoted Scott's statement that the construction of a pedigree of plants is at present a pious wish. Considering the long time before a truly natural system can come, might not some of the confusion of varying systems be overcome by periodic agreement at least so far as plant families?"

Meeting adjourned.

B. O. DODGE,
Secretary